



April 2007

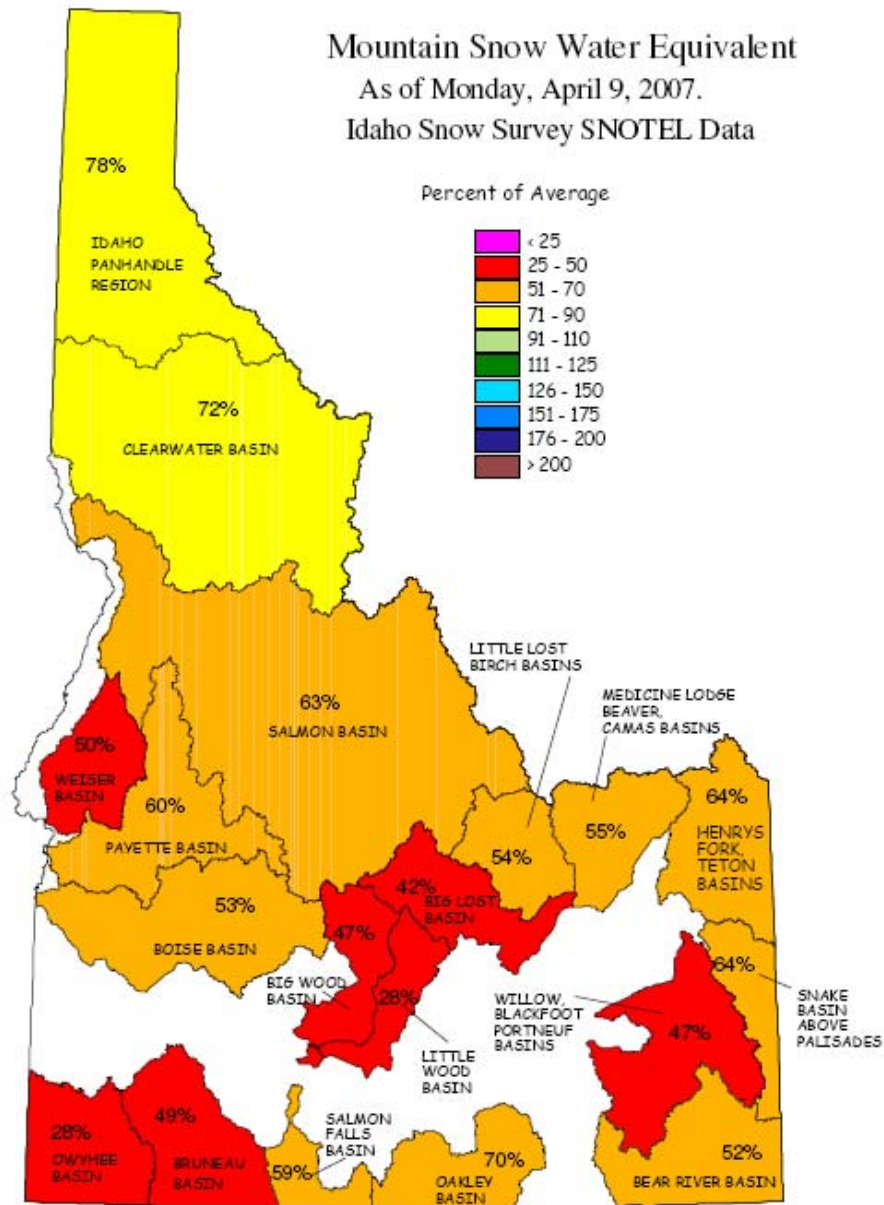
Water Supply Committee



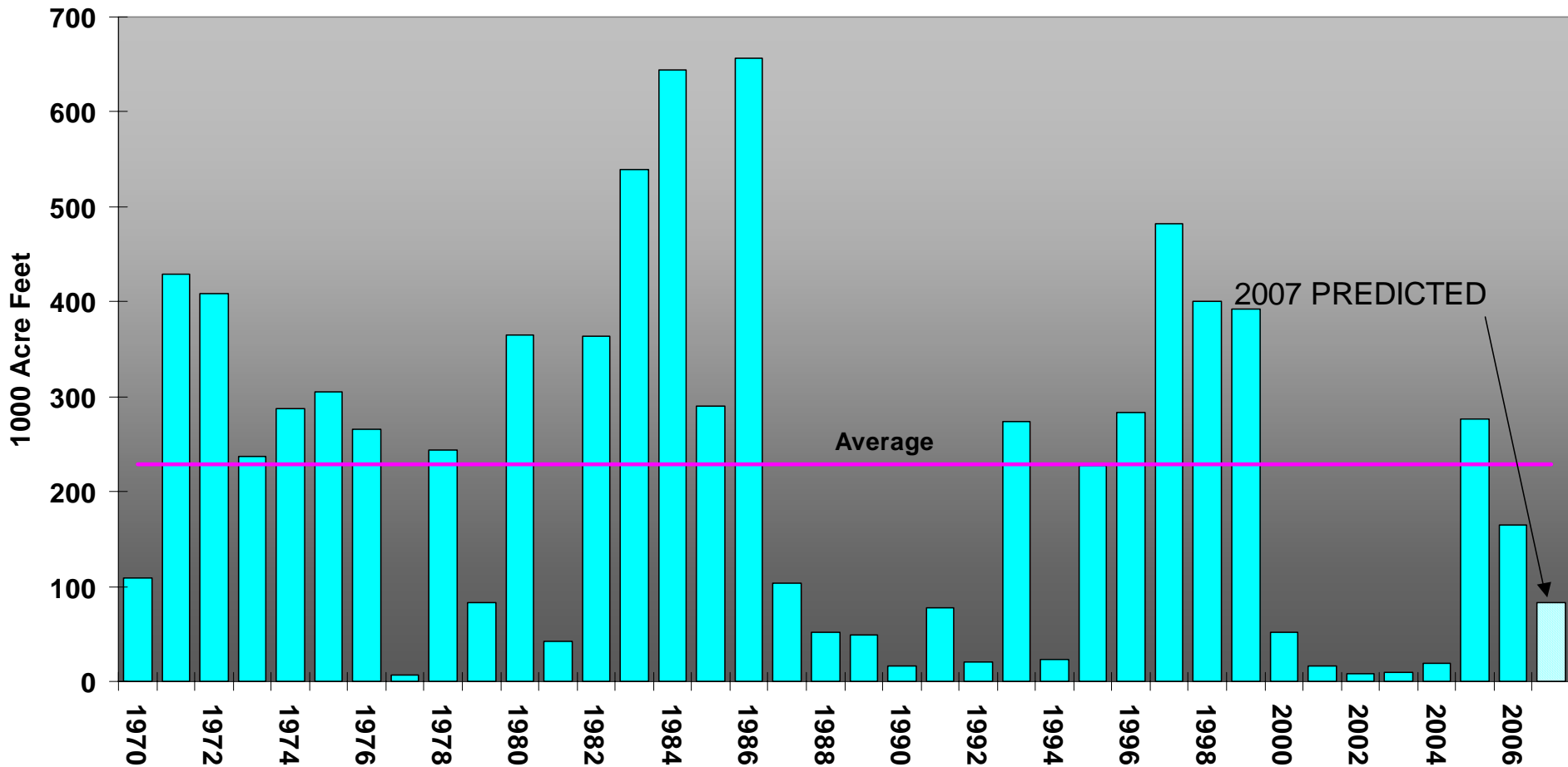
Mountain Snow Water Equivalent

As of Monday, April 9, 2007.

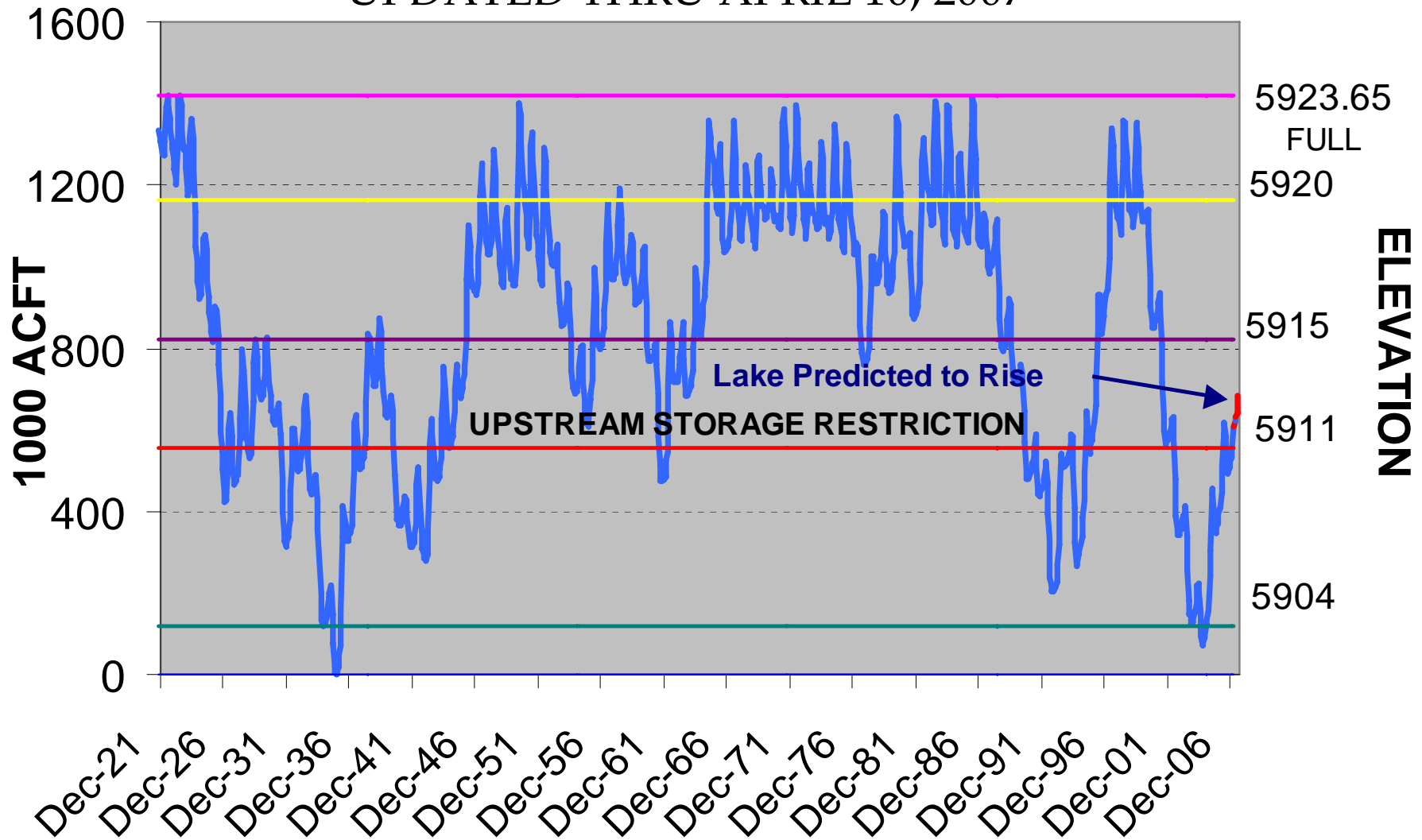
Idaho Snow Survey SNOTEL Data



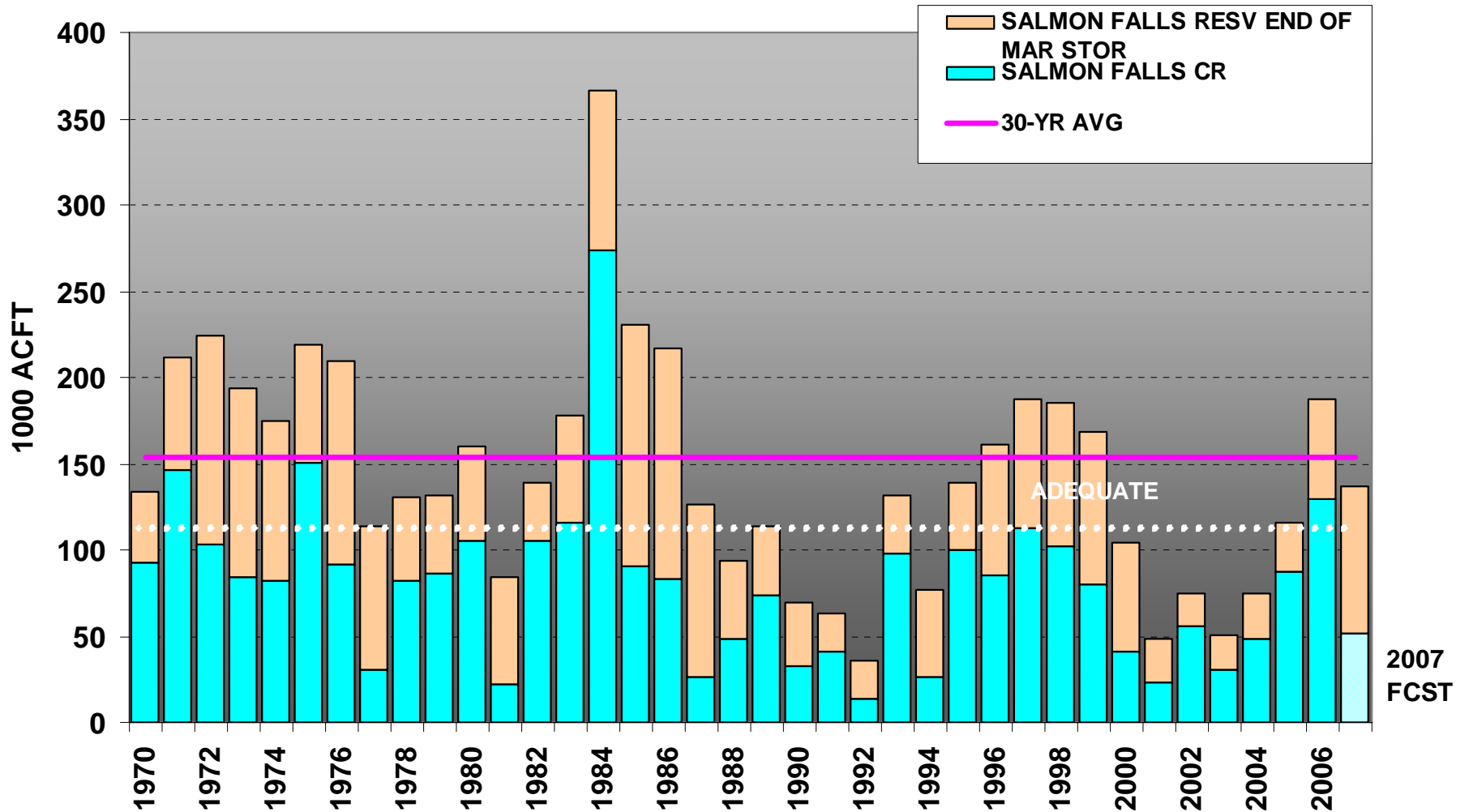
Bear Lake Inflow
APRIL THROUGH SEPTEMBER RAINBOW INLET CANAL VOLUME



BEAR LAKE END OF MONTH STORAGE
WATER YEARS 1922-2007
UPDATED THRU APRIL 10, 2007

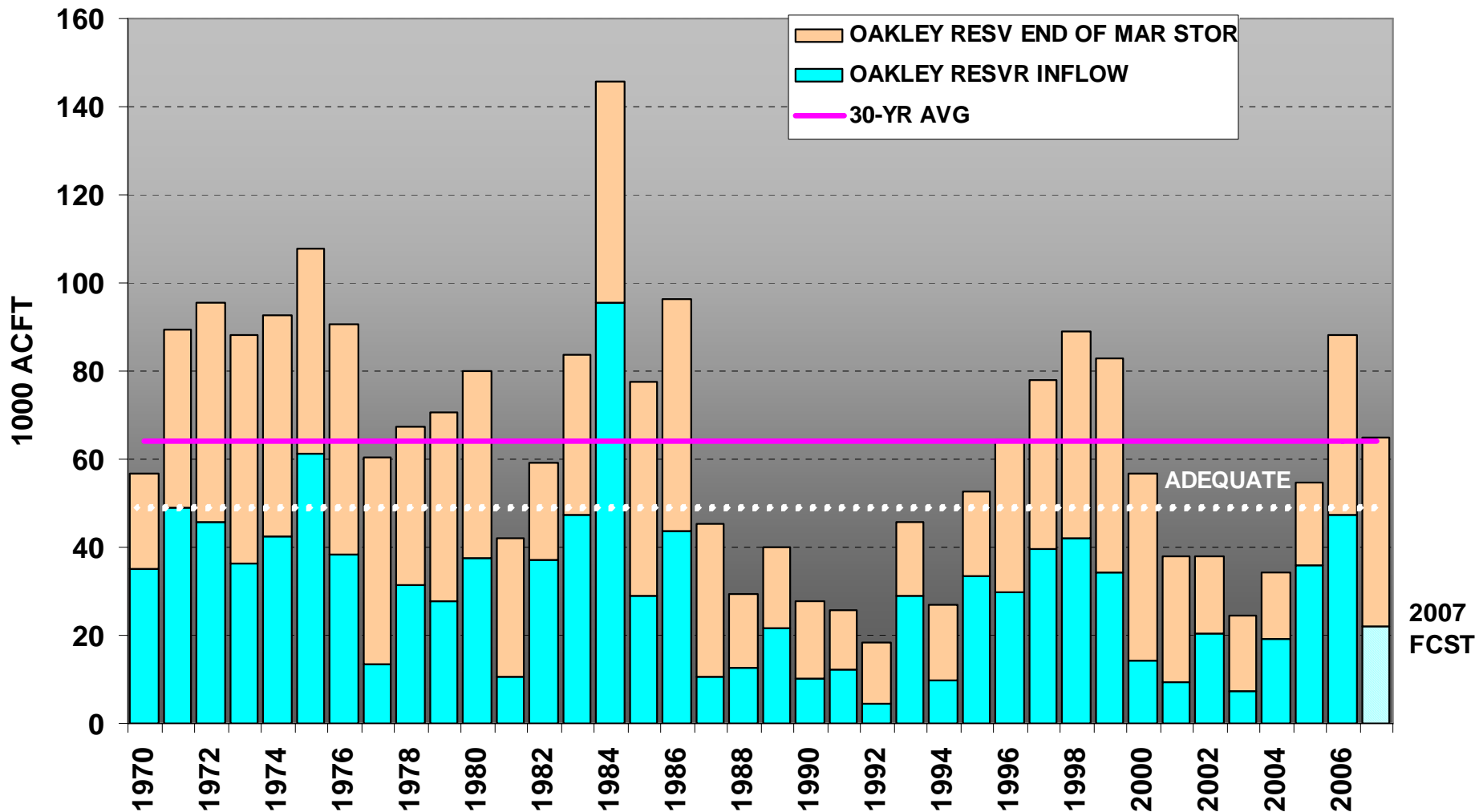


**SALMON FALLS CREEK NR SAN JACINTO, NV
APRIL THROUGH SEPTEMBER VOLUME
+ SALMON FALLS RESERVOIR**



OAKLEY RESERVOIR INFLOW APRIL THROUGH SEPTEMBER VOLUME

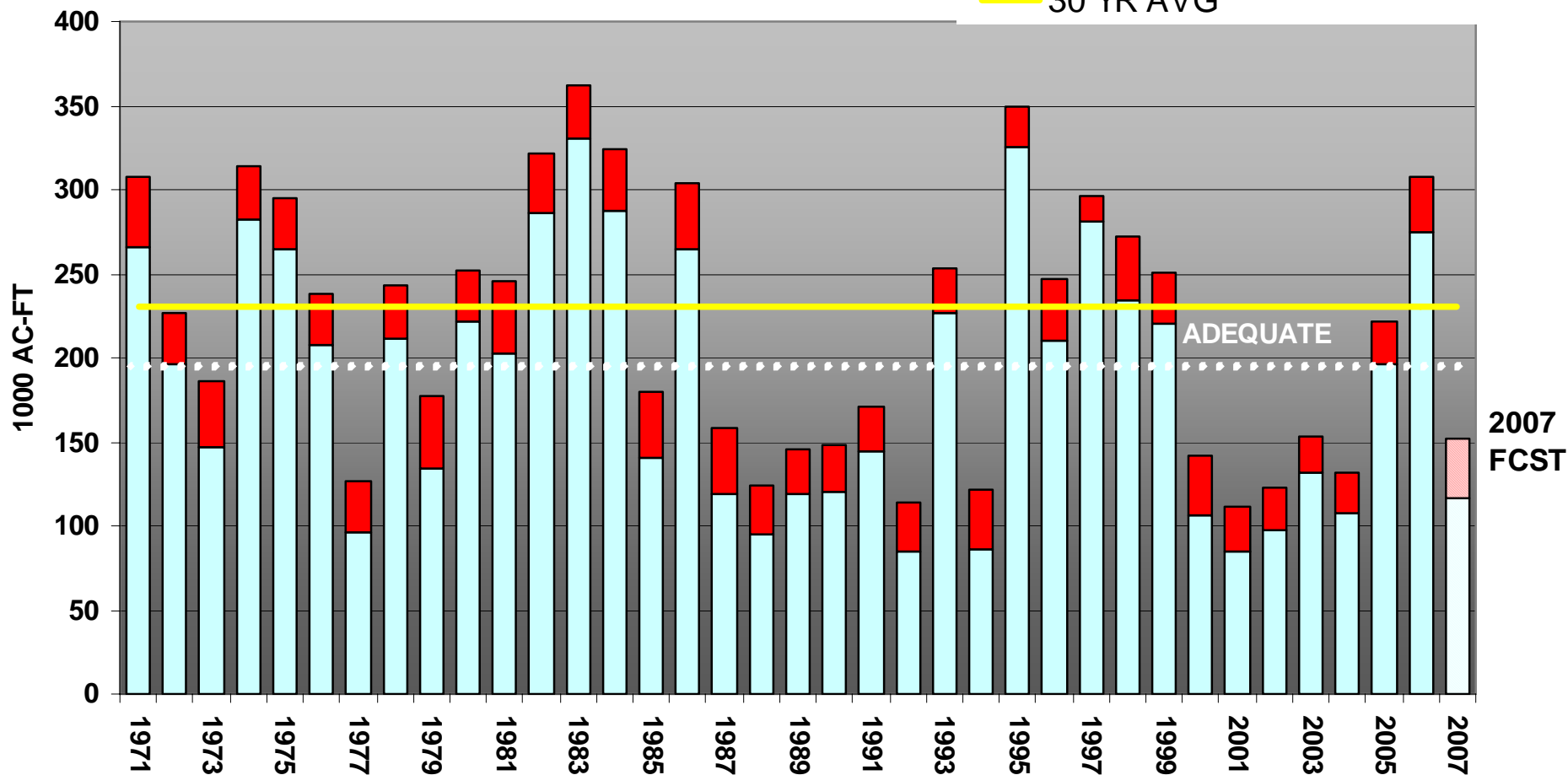
END OF MARCH STORAGE



BIG LOST APR - SEP FLOW VOLUMES MACKAY RESERVOIR END OF MARCH STORAGE

MACAKY RESERVOIR END
OF MAR STOR
BIG LOST AT HOWELL

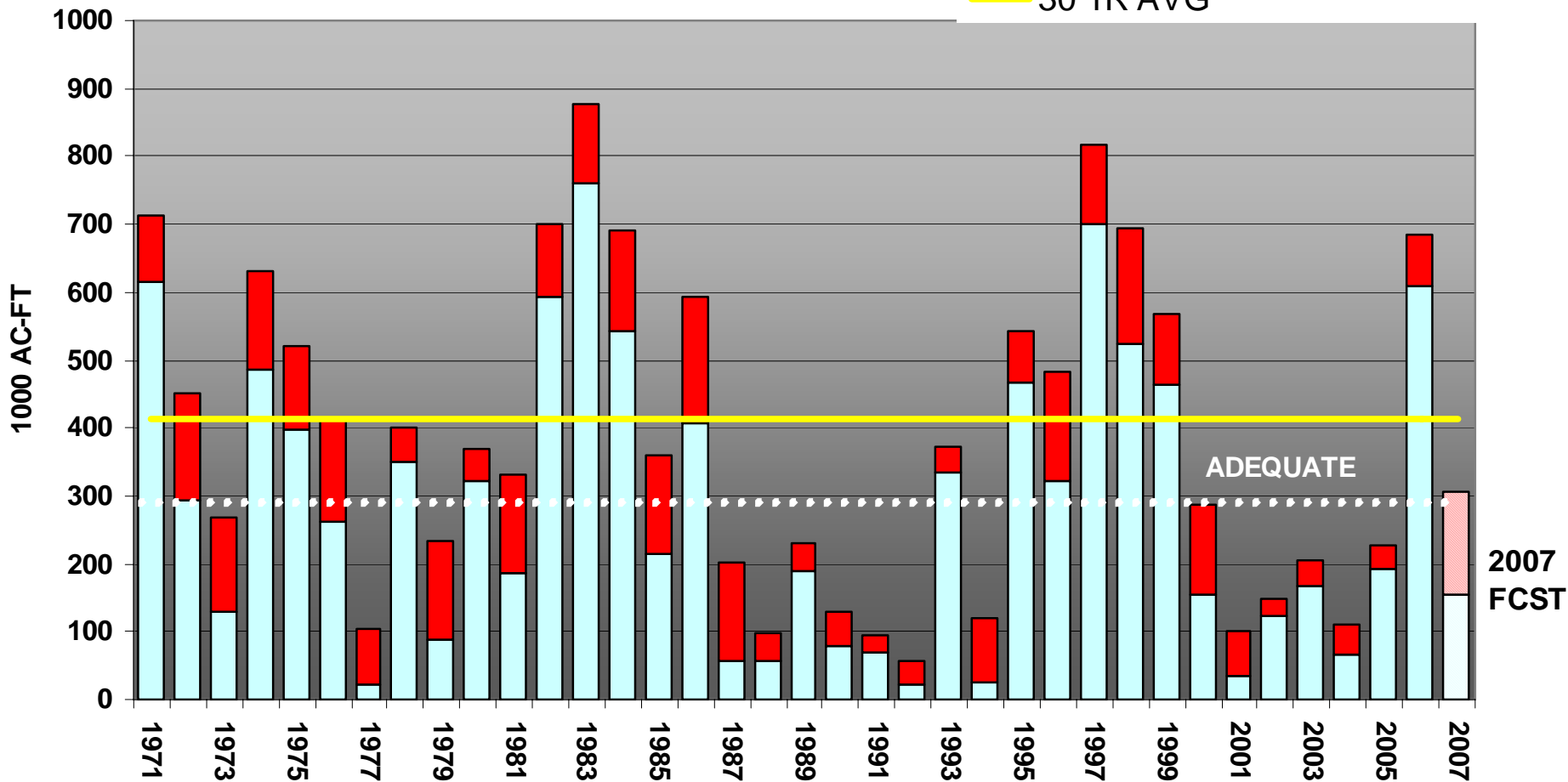
30 YR AVG



BIG WOOD APR - SEP FLOW VOLUMES MAGIC STORAGE MARCH 31

MAGIC RESERVOIR END OF
MAR STOR
MAGIC INFLOW

30 YR AVG

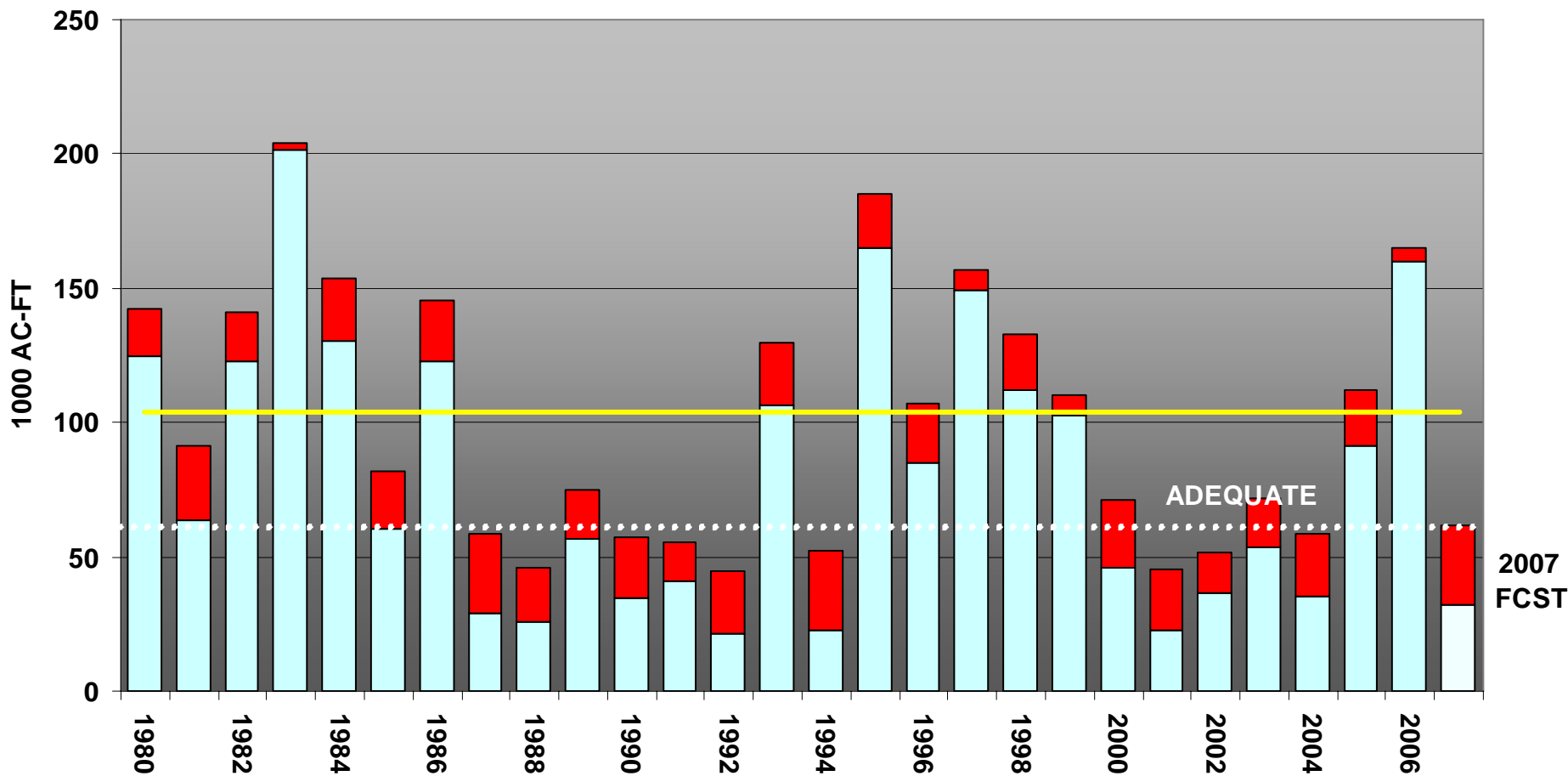


ADEQUATE

2007
FCST

LITTLE WOOD APR - SEP FLOW VOLUMES STORAGE MARCH 31

- RESERVOIR END OF MAR
- STOR
- RESERVOIR INFLOW
- 30 YR AVG







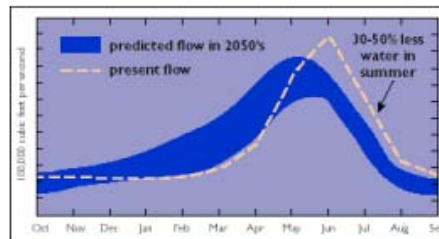
FLOW TIMING OF SNAKE RIVER

CLIMATE IMPACTS SUBCOMMITTEE APRIL 2007 MEETING WHITE PAPER

1. What do you see as your agencies information needs. Include items such as: data collection/monitoring, analytical tools/models, or institutional/public policy issues.

Downscaled annual or seasonal river basin flow data that represents the precipitation/snowmelt/runoff regimes that are predicted to accompany climate change. Predictive data for 10, 20, and 50 years out, for example, could be used to ascertain the changes to river flows and how that would effect current irrigation practices. The changes to annual flow hydrographs are thought to be like what is shown in Figure 1 below. This change in natural flow availability coupled with the increased temperature and increased evapotranspiration will impact irrigated agriculture. Just how severe, or maybe how inconsequential these impacts will be, is not currently known. A better understanding of the impacts could be achieved once the downscaled flow data are available. Changes to reservoir operations to optimize hydropower, recreation, irrigation storage, and flood control rule curves are aspect of water resources systems and planning that climate impacts will require us to address.

Downscaled temperature data are also valuable for addressing impacts to water supply and demand. Increased temperatures will increase evaporation from reservoirs, and may increase evapotranspiration from plants. A longer growing season may lead to different cropping patterns in irrigated agriculture, such as more alfalfa with additional cuttings. How these temperature increases affect consumptive use curves will be valuable for planning future management needs of surface and groundwater systems in the state.



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April 2007

Climate Impacts Subcommittee

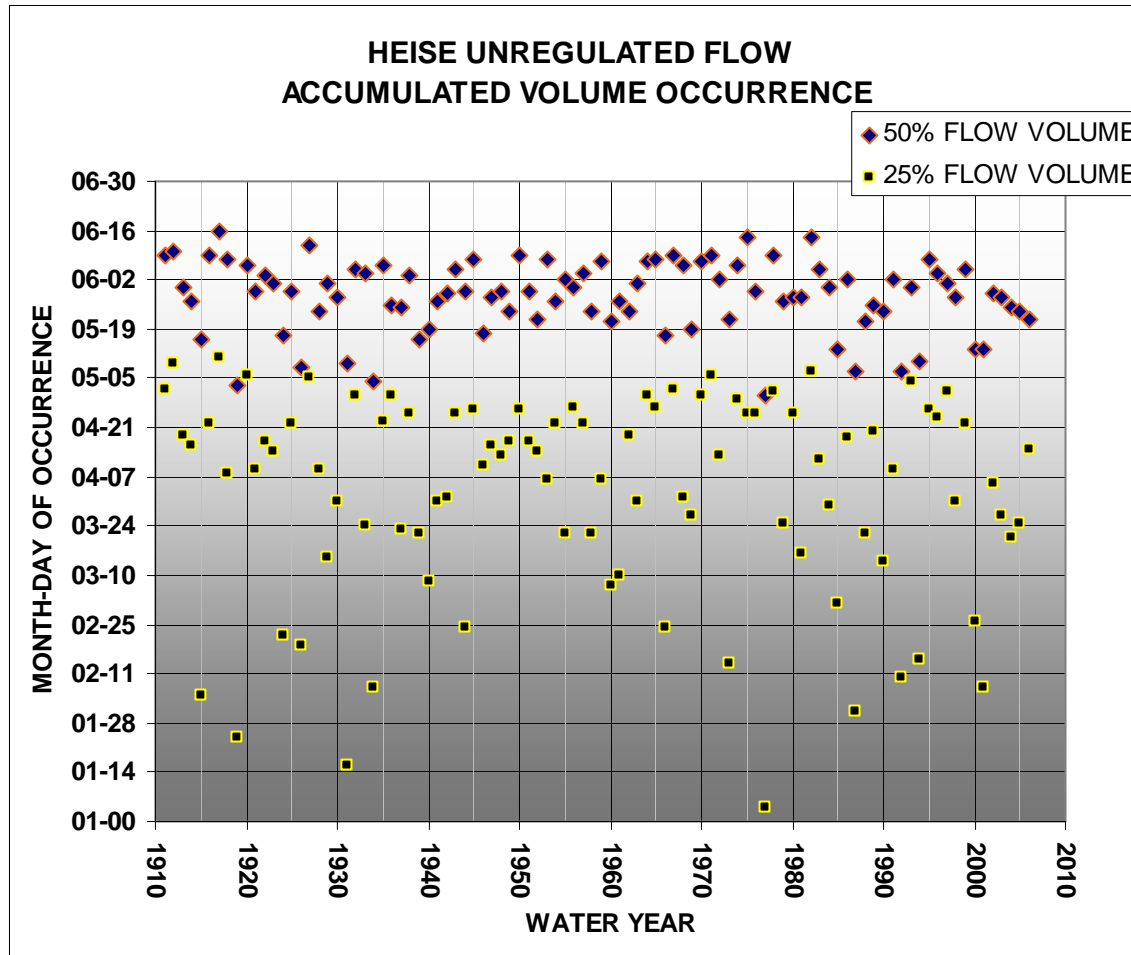
DATA NEEDS

Downscaled time series

- **precipitation, snowmelt, river flows**
- **temperature and consumptive use**

Current Programs

Runoff timing in upper Snake Basin



Collaborative Data Sites

Source for downscaled time series

- UW type model for serving data from the www
- Hosting agency?

Future Cooperative Efforts

- River basin modeling
- Crop water requirements